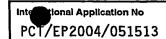
INTERNATIONAL SEARCH REPORT



A. CLASSIFICATION OF SUBJECT MATTER IPC 7 B23Q17/22 B23Q17/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC $\frac{1}{7}$ B23Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
Α	US 2001/017699 A1 (EGELHOF JOACHIM) 30 August 2001 (2001-08-30) the whole document	1–17		
Α	DE 196 29 616 A (HEILIG & SCHWAB GMBH) 29 January 1998 (1998-01-29) the whole document	1–17		
A	US 3 912 925 A (GASKELL JESSE) 14 October 1975 (1975-10-14) cited in the application the whole document	1–17		
	-/			

X Further documents are listed in the continuation of box C.	χ Patent family members are listed in annex.
Special categories of cited documents: A* document defining the general state of the art which is not considered to be of particular relevance E* earlier document but published on or after the international filling date L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) O* document referring to an oral disclosure, use, exhibition or other means P* document published prior to the international filling date but later than the priority date claimed	 "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search 14 October 2004	Date of mailing of the international search report 22/10/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Müller, A

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Internal Application No PCT/EP2004/051513

		PC1/EP2004/051513
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 03, 27 February 1998 (1998-02-27) & JP 9 300178 A (MAKINO MILLING MACH CO LTD), 25 November 1997 (1997-11-25) cited in the application abstract	1–17

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IN LERNATIONAL SEARCH REPURT

formation on patent family members

Internal Application No PCT/EP2004/051513

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 2001017699	A1	30-08-2001	DE	10000491 A1	12-07-2001
DE 19629616	A	29-01-1998	DE	19629616 A1	29-01-1998
US 3912925	Α	14-10-1975	NONE		
JP 9300178	Α	25-11 - 1997	NONE		

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